



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,235	06/27/2001	Takahiro Hosomi	053969-0128	1598

22428 7590 03/19/2007  
FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
----------

TORRES, JUAN A

ART UNIT	PAPER NUMBER
----------	--------------

2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 09/891,235	Applicant(s) HOSOMI, TAKAHIRO	
	Examiner Juan A. Torres	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5,7,8,14-19 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,7,8,14-19 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

The modifications to the drawings were received on 02/09/2007. These modifications are accepted by the Examiner.

In view of the amendment filed on 02/09/2007, the Examiner withdraws drawings objections of the previous Office action.

### ***Specification***

The modifications to the specification were received on 02/09/2007. These modifications are accepted by the Examiner.

In view of the amendment filed on 02/09/2007, the Examiner withdraws Specification objections of the previous Office action.

The disclosure is objected to because of the following informalities: The recitation in page 12 line 4 "23 d23" is improper; it is suggested to be changed to "d23" (see figure 32). Appropriate correction is required.

### ***Claim Objections***

The modifications to the claims were received on 02/09/2007. These modifications are accepted by the Examiner.

In view of the amendment filed on 02/09/2007, the Examiner withdraws claims objections to claims 1 and 2 of the previous Office action.

### ***Claim Rejections - 35 USC § 112***

The modifications to the claims were received on 02/09/2007. These modifications are accepted by the Examiner.

In view of the amendment filed on 02/09/2007, the Examiner withdraws claims rejections under 35 USC § 112 first paragraph to claims 3-8 and 23 of the previous Office action.

In view of the amendment filed on 02/09/2007, the Examiner withdraws claims rejections under 35 USC § 112 second paragraph to claims 3-8, 14-19, 23 and 24 of the previous Office action.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "a bit number of an error correction code used in signal transmission between the equipment and the counterpart equipment is changed from a current bit number" in claims 25-35 is a relative term which renders the claim indefinite. The term "a bit number of an error correction code used in signal transmission between the equipment and the counterpart equipment is changed from a current bit number" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

It is not understood what means that a bit number is changed.

In an intend to advance the prosecution of the case the Examiner will interpreted this limitation in the way that the code rate of the Forward Error Correction code is

changed, changing the amount of parity bits of the FEC code (the only reference to this limitation that the Examiner was able to find in the specification was from page 17 line 21 to page 18 line 10 in reference with figure 6).

***Claim Rejections - 35 USC § 101***

The modifications to the claims were received on 02/09/2007. These modifications are accepted by the Examiner.

In view of the amendment filed on 02/09/2007, the Examiner withdraws claims rejections under 35 USC § 101 to claims 14-19 and 24 of the previous Office action.

***Response to Arguments***

Regarding claim 5 under Yamaura:

Applicant's arguments filed on 02/09/2007 have been fully considered but they are not persuasive.

The Applicant contends, "With respect to independent claim 5, that claim recites that when the communication quality is not degraded below a predetermined level and the transmission power is not minimum, the transmission power is lowered. Thus, according to claim 5, the transmission power is varied even when the communication quality is determined to be OK. This situation does not exist in the system of Yamaura, which would not vary an existing transmission power used for communications between equipments, as long as the communication quality is determined to be OK" (emphasis in original).

The Examiner disagrees and asserts, that, as indicated in the previous Office action, Yamaura discloses that when the communication quality is not degraded below

a predetermined level and the transmission power is not minimum, the transmission power is lowered (column 12 lines 60-65 and column 14 lines 41-47). Specifically Yamaura discloses, "Because the process gain is raised by increasing the clock rate of the transmission spread code, the gain of the output amplifier 108 may be reduced under control of the BER detector 115 to the lowest practicable level as long as the minimum bit error rate is not exceeded. This arrangement reduces power dissipation", so even though the quality is OK, the system reduces the gain of the power amplifier to as much as possible to reduce power consumption.

For these reasons and the reason stated in the previous Office action, the rejection of claim 5 is maintained.

Regarding claim 7 under Yamaura:

Applicant's arguments filed on 02/09/2007 have been fully considered but they are not persuasive.

The Applicant contends, " Still further, with respect to independent claim 7, that claim recites that when the communication quality is not degraded below a predetermined level and the transmission power is minimum, and when a vacant band is present in a narrower band than a currently used frequency band, the frequency band is varied to narrower band. Thus, according to claim 7, the frequency band is varied even when the communication quality is determined to be OK. This situation does not exist in the system of Yamaura, which would not vary an existing frequency band used for communications between equipments, as long as the communication quality is determined to be OK. Column 9, lines 31-47 and Block S16 of Figure 10 of Yamaura do

not describe the above-mentioned features of claim 7. Rather, column 9, lines 31-47 of Yamaura describes a method in which a narrow band width is used if the communication traffic is determined to be lower than a threshold value. Block S16 of Figure 10 of Yamaura describes that each terminal is instructed to go to a narrow band width when the S/N ratio  $X$  is greater than a threshold value  $x_B$ . Neither of these portions of Yamaura discloses or suggest that the frequency band is varied even when the communication quality is determined to be OK" (emphasis in original).

The Examiner disagrees and asserts, that, as indicated in the previous Office action, Yamaura discloses when the communication quality is not degraded below a predetermined level and the transmission power is minimum, and when a vacant band is present in a narrower band than a currently used frequency band, the frequency band is varied to narrower band (figure 10 block s16 column 9 lines 31-47). Specifically Yamaura discloses, "In step S13, the base station checks to see if the currently detected amount of traffic  $T$  is lower than another predetermined threshold value  $T_B$  ( $T < T_B$ , where  $T_B < T_B$ ). If the amount of traffic  $T$  is found to be lower than the threshold value  $T_B$ , step S16 is reached. In step S16, the base station instructs each terminal when to narrow the band width of the spread spectrum signal and how much", so even though the quality is OK, because the traffic is below a threshold (still the quality of the transmission is OK, but we are wasting bandwidth), the system reduces the bandwidth to as much as possible to reduce frequency bandwidth used.

For these reasons and the reason stated en the previous Office action, the rejection of claim 7 is maintained.

Regarding claim 16 under Yamaura:

Applicant's arguments filed on 02/09/2007 have been fully considered but they are not persuasive.

The Applicant contends, "Similarly, independent claim 16 recites that when the communication quality is not degraded below a predetermined level and the transmission power is not minimum, the transmission power is lowered. This purposeful lowering of the transmission power in order to not interfere with other communication channels used by other equipment is not disclosed or suggested by Yamaura".

The Examiner disagrees and asserts, that, as indicated in the previous Office action, Yamaura discloses that when the communication quality is not degraded below a predetermined level and the transmission power is not minimum, the transmission power is lowered (column 12 lines 60-65 and column 14 lines 41-47). Specifically Yamaura discloses, "Because the process gain is raised by increasing the clock rate of the transmission spread code, the gain of the output amplifier 108 may be reduced under control of the BER detector 115 to the lowest practicable level as long as the minimum bit error rate is not exceeded. This arrangement reduces power dissipation", so even though the quality is OK, the system reduces the gain of the power amplifier to as much as possible to reduce power consumption.

For these reasons and the reason stated in the previous Office action, the rejection of claim 16 is maintained.



Regarding claims 8, 14, 15, 17 and 19 under Yamaura:

Applicant's arguments filed on 02/09/2007, have been fully considered but they are not persuasive.

The Applicant contends, "With respect to independent claims 8, 14, 15, 17 and 19, those claims now recite that the control step (or unit) varies the transmission band width in preference to varying the transmission power. Such preferential varying of the transmission band width over the transmission power is not disclosed or suggested by Yamaura. The Office Action asserts that column 12, lines 44-49 of Yamaura describes this preferential varying. Applicant respectfully disagrees. Column 12, lines 44-49 of Yamaura merely describes that there is a relationship between transmission spread code clock rates and increased margins of power control precision, whereby there is no disclosure or suggestion that transmission band width is varied in preference to varying transmission power" (emphasis in original).

The Examiner disagrees and asserts, that, Yamaura specifically discloses:

"FIG. 16 is a view depicting a relationship between raised transmission spread code clock rates and increased margins of power control precision in connection with the second embodiment. As illustrated, raising the transmission spread code clock rate-near the upper limit of the system's line capacity provides the output high-power amplifier 108 with significantly greater margins of power control precision", (emphasis added) (column 12 lines 43-49); and

"Because the process gain is raised by increasing the clock rate of the transmission spread code, the gain of the output amplifier 108 may be reduced under

Art Unit: 2611

control of the BER detector 115 to the lowest practicable level as long as the minimum bit error rate is not exceeded. This arrangement reduces power dissipation" (column 12 lines 60-65).

So to increase the margin of the power control, the bandwidth is modified previously.

For these reasons and the reason stated en the previous Office action, the rejection of claims 8, 14, 15, 17 and 19 are maintained.

Regarding claims 23 and 24 under Yamaura:

Applicant's arguments filed on 02/09/2007 have been fully considered but they are not persuasive.

The Applicant contends, "With respect to independent claims 23 and 24; they recite features discussed above with respect to presently pending independent claims 8, 15, 17 and 19, whereby such features are not disclosed or suggested by Yamaura".

The Examiner disagrees and asserts, that, as indicated in the previous Office action, because the rejection of claims 8, 15, 17 and 19 are maintained, the rejection of claims 23 and 24 are also maintained.

For these reasons and the reason stated en the previous Office action, the rejection of claims 23 and 24 are maintained.

Regarding claim rejections under Lucidarme:

Applicant's arguments filed on 01/25/2007 have been fully considered.

Even though Applicant's arguments filed on 01/25/2007 are not persuasive because Lucidarme discloses that circuit 66 determines an "optimum combination of

bandwidth and transmission power", and because the modification of bandwidth increases the gain of the power amplifier control (as discussed above in reference to Yamaura), so Lucidarme discloses to modify the bandwidth in preference to modify the power to obtain an optimum combination, and this is done when the quality of the transmission is OK with the intention of obtaining the optimum combination.

To advance to prosecution of the case, the art rejections under Lucidarme have been withdrawn.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5, 7, 8, 14-19 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaura (US 5504776 A).

As per claim 5, Yamaura discloses a spread spectrum communication system comprising a receiving unit configured to receive a communication quality of a communication channel between an equipment and a counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and a control unit configured to control transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figure 14 column 12 lines 8-19 and 60-65), where when the communication quality is not degraded below a predetermined level

and the transmission power is not minimum, the transmission power is lowered (column 12 lines 60-65 and column 14 lines 41-47).

As per claim 7, Yamaura discloses a spread spectrum communication system comprising a receiving unit configured to receive a communication quality of a communication channel between an equipment and a counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and a control unit configured to control a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figure 14 column 12 lines 8-19 and 60-65), where when the communication quality is not degraded below a predetermined level and the transmission power is minimum, and when a vacant band is present in a narrower band than a currently used frequency band, the frequency band is varied to narrower band (figure 10 block s16 column 9 lines 31-47).

As per claim 8, Yamaura discloses a spread spectrum communication system comprising a receiving unit configured to receive a communication quality of a communication channel between an equipment and a counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and a control unit configured to control a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figure 14 column 12 lines 8-19 and 60-65), where the communication quality is classified into three levels depending upon degree, when the communication quality is in medium level, the control means maintains current frequency band and transmission power (figure 10 block s17 column 9 lines 31-40), and where the control unit varies the transmission band width in preference to varying the

transmission power (column 12 lines 43-49 and 60-65, see response to arguments above).

As per claim 14, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where when the communication quality is degraded below a predetermined level, the control step varies a transmission band to a wider frequency band when a vacant band is present in a wider band than a currently used frequency band (figure 10 block s14 column 12 lines 8-19 and 60-65), and where the control unit varies the transmission band width in preference to varying the transmission power (column 12 lines 43-49 and 60-65, see response to arguments above).

As per claim 15, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where when the communication quality

is degraded below a predetermined level, the control step increases a transmission power when a vacant band is not present in a wider band than a currently used frequency band (column 8 lines 56-67 figures 8A to 8C. The effect of increasing the power is equivalent, under the doctrine of equivalents to the effect of increasing the bandwidth (column 8 lines 56-67 figures 8A to 8C) increasing the bandwidth to increase the quality (figure 10 block s14 column 9 lines 11-30) and when no bandwidth is available he system will use the transmission power to meet the quality requirements (column 12 lines 44-49), and where the control unit varies the transmission band width in preference to varying the transmission power (column 12 lines 43-49 and 60-65, see response to arguments above).

As per claim 16, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where when the communication quality is not degraded below a predetermined level and the transmission power is not minimum, the transmission power is lowered (column 12 lines 60-65 and column 14 lines 41-47).

As per claim 17, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart

equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where when the communication quality is not degraded below a predetermined level and the transmission power is minimum, and when a vacant band is not present in a narrower band than a currently used frequency band, the current frequency band and transmission power are maintained (figure 10 block s17 column 9 lines 31-40), and where the control unit varies the transmission band width in preference to varying the transmission power (column 12 lines 43-49 and 60-65, see response to arguments above).

As per claim 18, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where when the communication quality is not degraded below a predetermined level and the transmission power is minimum, and when a vacant band is present in a narrower band than a currently used frequency band, the frequency band is varied to narrower band (figure 10 block s16 column 9 lines 31-47).

As per claim 19, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where the communication quality is classified into three levels depending upon degree, when the communication quality is in medium level, the control step maintains current frequency band and transmission power (figure 10 block s17 column 9 lines 31-40), and where the control unit varies the transmission band width in preference to varying the transmission power (column 12 lines 43-49 and 60-65, see response to arguments above).

As per claim 23, Yamaura discloses a spread spectrum communication system comprising a receiving unit configured to receive a communication quality of a communication channel between an equipment and a counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and a control unit configured to control a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figure 14 column 12 lines 8-19 and 60-65), where when the communication quality is degraded below a predetermined level, the control unit varies the transmission band width in preference to varying the transmission power (column 12 lines 44-49).



As per claim 24, Yamaura discloses a spread spectrum communication method comprising receiving, by an equipment engaged in communications with a counterpart equipment, a communication quality of a communication channel used for the communications between the equipment and the counterpart equipment (figure 14 block 115 column 12 lines 8-30 and 60-65); and controlling a transmission bandwidth and a transmission power of a counterpart equipment depending upon the communication quality (figures 9 and 10 column 9 lines 11-64), where when the communication quality is degraded below a predetermined level, the control step varies the transmission bandwidth in preference to varying the transmission power (column 12 lines 44-49).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaura as applied to claims 5, 7, 8, 14-19, 23 and 24 above, and further in view of Cobb (US 6606357 B1).

As per claims 25-35, Yamaura discloses claims 5, 7, 8, 14-19, 23 and 24, Yamaura doesn't disclose that when the transmission band width is varied, a bit number of an error correction code used in signal transmission between the equipment and the counterpart equipment is changed from a current bit number. Cobb discloses that when the transmission band width is varied, a bit number of an error correction code used in

Art Unit: 2611

signal transmission between the equipment and the counterpart equipment is changed from a current bit number (column 3 lines 17-28). Yamaura and Cobb teachings are analogous art because they are from the same field of endeavor of Digital communications. At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate in the communication system disclosed by Yamaura the code rate variation disclosed by Cobb. The suggestion/motivation for doing so would have been to gain efficiency of the system (column 3 lines 17-28).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is 571-272-3119. The examiner can normally be reached on 8-6 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juan Alberto Torres  
03-01-2007

TEMESGHEB GHEBREYESAE  
PRIMARY EXAMINER  
5/1/07